



P04C2

Fuel Fill Door Unlock Control Circuit High

P04C2 indicates that the fuel fill door unlock control circuit is reading a high voltage condition, meaning the powertrain control module (PCM) has detected an open circuit, a short to voltage, or a faulty actuator on the circuit that unlocks the fuel filler door. The PCM commands the door to unlock and monitors the circuit for expected voltage changes; when the voltage stays above the normal threshold, it sets this code.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Low	Intermediate	Auxiliary emission controls

Symptoms you may notice

- The fuel fill door may not unlock when commanded, making refueling difficult or impossible.
- A warning light on the dashboard, often the check engine light or a dedicated message.
- No noticeable symptoms besides the warning light in some cases, especially if the door still operates manually.
- The fuel fill door may unlock intermittently or only after multiple attempts.
- A clicking or buzzing sound from the actuator area when attempting to unlock, indicating the actuator is receiving power but may be binding.
- Other unrelated electrical gremlins if the high voltage condition affects shared circuits.

Common causes, most likely first

- 1 A faulty fuel fill door unlock actuator (solenoid or motor) that has an open winding or internal short.
- 2 Damaged or corroded wiring between the PCM and the actuator, such as a broken wire or high resistance connection.
- 3 A short to voltage on the control circuit, often from chafed wiring contacting a power source.
- 4 A poor ground connection at the actuator or chassis, causing the circuit to read high.
- 5 A malfunctioning PCM driver for the unlock circuit, though this is less common.
- 6 Water intrusion or debris in the fuel door actuator connector causing corrosion and high resistance.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in other modules.
- 2 Inspect the fuel fill door actuator and its connector for corrosion, damage, or loose pins.
- 3 Test the actuator with a multimeter to check for open or shorted windings, and compare to specifications.
- 4 Check the wiring harness for continuity and shorts to voltage or ground, especially in areas prone to flexing or moisture.
- 5 Test the ground circuit for the actuator to ensure it is clean and tight.
- 6 If the actuator tests good, check the PCM output signal with a scope or bidirectional scan tool to confirm the command.
- 7 Replace the faulty actuator or repair wiring as needed, then clear the code and verify the repair.

Before you replace the fuel door actuator

- A high voltage code on an actuator circuit often results from a poor ground rather than a failed actuator, so always check grounds first.
The fuel fill door unlock circuit may share a fuse or relay with other systems, so a blown fuse could cause this code along with other symptoms.
- In some vehicles, the fuel fill door unlock is integrated with the central locking system, so a fault in the door lock circuit can set this code.
- A stuck or binding fuel door mechanism can cause the actuator to draw high current, leading to a high voltage code without an electrical fault.
- After replacing the actuator, the PCM may need to relearn the circuit; check for any calibration procedures.

Can I keep driving with P04C2?

You can generally continue driving with this code because it does not affect engine operation or safety, but you may be unable to refuel if the door will not unlock. Avoid forcing the fuel door open, as this can cause additional damage; use the manual release if available.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Test light
- Wire repair kit (soldering iron, heat shrink, etc.)
- Service manual or wiring diagram for the specific vehicle



Reading P04C2

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Auxiliary emission controls.
- C2** The exact fault within that area.

Often seen with

P04C0 Fuel Fill Door Unlock Control Range/Performance · **P04C1** Fuel Fill Door Unlock Control Circuit Low · **P04C3** Fuel Fill Door Lock Position Sensor/Switch Circuit · **P04C4** Fuel Fill Door Lock Position Sensor/Switch Circuit Range/Per · **P04C5** Fuel Fill Door Lock Position Sensor/Switch Circuit Low

See it working

Watch the animated explainer [How Coil-on-Plug Ignition Works: Coil and Spark Plug](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p04c2/>

